



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

APPLICANT(s): Terho Kaikuranta

SERIAL NO.: 09/847,142 ART UNIT: 2612

FILING DATE: 05/02/2001 EXAMINER: Wong, Albert Kang

TITLE: KEYPAD ILLUMINATION ARRANGEMENT THAT ENABLES DYNAMIC AND INDIVIDUAL ILLUMINATION OF KEYS, AND METHOD OF USING THE SAME

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**AMENDED APPELLANTS' BRIEF**

This is an Amended Appellants' Brief submitted in response to the Notification of Non-Compliant Appeal Brief mailed on 4 January 2008.

Section V. SUMMARY OF CLAIMED SUBJECT MATTER has been amended and is presented below.

## V. SUMMARY OF CLAIMED SUBJECT MATTER

1. Independent claim 1 is directed to a keypad for a mobile phone referred to on page 13, lines 12-16 of the specification. The keypad comprises a number of pressable keys as shown in Figure 4, and described on page 6, lines 21-34. Associated with each key is a switching means for realizing a switching function as a response to the key being pressed, for example, as described on page 6, lines 28-32, Figure 5, items 501, 502 and page 6, line 36 through page 7, line 4, Figure 6A, items 501, 502 and page 7, lines 23-26, Figure 6B, items 611, 612 and page 7, lines 29-34, and Figure 6C, items 620, 621 and page 7, line 34 through page 8, line 2. The keypad also comprises illumination means for illuminating at least a part of the keypad, for example, as shown in Figure 4, and described on page 6, lines 32-34, Figure 5, item 503 and page 7, lines 3-9, Figure 6A, item 601 and page 7, lines 25-29, Figure 6B, item 610 and page 7, lines 29-34, and Figure 6C, item 623 and page 8, lines 2-6.

The illumination means comprise light sources that are semiconductor light-emitting devices made of layered foil structures as described in the specification for example, on page 2, lines 31-33 and page 3, lines 9-12. The semiconductor light-emitting devices are for dynamically illuminating individual keys or key groups of said keypad in such a way that the illumination means is reconfigurable for different kinds of illumination effects, for example, as shown in Figures 8, 9, and 10 and as described on page 9, lines 1-35. At least one of said light sources is located in the immediate vicinity of the switching means associated with at least one key, for example, as described on page 6, line 35 through page 8, line 6, and shown in Figures 5 and 6a-6c.

The light sources constitute at least a first group of light sources and a second group of light sources and said first and second groups of light sources are arranged to be illuminated separately from each other, for example, as shown in Figures 8, 9, and 10 as described on page 9, lines 1-35.

2. Dependent claim 11 further defines the illumination means of claim 1, as shown in Figure 4, and described on page 6, lines 32-34, Figure 5, item 503 and page 7, lines 3-9, Figure 6A, item 601 and page 7, lines 25-29, Figure 6B, item 610 and page 7, lines

29-34, and Figure 6C, item 623 and page 8, lines 2-6. The illumination means comprise a light source Figure 4, and described on page 6, lines 32-34, Figure 5, item 503 and page 7, lines 3-9, Figure 6A, item 601 and page 7, lines 25-29, Figure 6B, item 610 and page 7, lines 29-34, and Figure 6C, item 623 and page 8, lines 2-6. The light source is in the immediate vicinity of the switching means associated with each key as described on page 6, lines 28-32, Figure 5, items 501, 502 and page 6, line 36 through page 7, line 4, Figure 6A, items 501, 502 and page 7, lines 23-26, Figure 6B, items 611, 612 and page 7, lines 29-34, and Figure 6C, items 620, 621 and page 7, line 34 through page 8, line 2.

3. Independent claim 16 is directed to a method for illuminating the keys of a keypad of a mobile phone, comprising providing light sources that are semiconductor light-emitting devices made of layered foil structures as described in the specification for example, on page 2, lines 31-33 and page 3, lines 9-12. The light sources are provided as illumination means, for example, as shown in Figure 4, and described on page 6, lines 32-34, Figure 5, item 503 and page 7, lines 3-9, Figure 6A, item 601 and page 7, lines 25-29, Figure 6B, item 610 and page 7, lines 29-34, and Figure 6C, item 623 and page 8, lines 2-6.

The illumination means are for dynamically illuminating individual keys or key groups of said keypad in such a way that the illumination means is reconfigurable for different kinds of illumination effects, for example, as shown in Figures 8, 9, and 10 and as described on page 9, lines 1-35.

The method also includes producing, with at least one of said light sources, an illuminating effect where at least one key is illuminated differently than certain other keys in the keypad, for example, as described on page 13, line 30 through page 14, line 4.

4. Independent claim 21 is directed to a keypad for a mobile phone, comprising a number of elements for example, as shown in Figure 4 and described on page 6, lines 21-34. The keypad comprises a mechanical support structure, for example as shown in Figure 4 as item 401 and described on page 6, lines 22-24, a plurality of keys, for

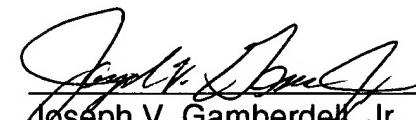
example, as shown in Figure 4 as item 402 and described on page 6, lines 22-24, and a layer including a switching function and a layered foil illumination structure for each of the plurality of keys, integrated together, for example, as shown in Figure 4 within item 403 and described on page 6, lines 28-34.

5. Independent claim 29 is directed to a mobile phone including a keypad as referred to on page 13, lines 12-16. The keypad comprises a number of elements for example, as shown in Figure 4 and described on page 6, lines 21-34. The keypad comprises a mechanical support structure, for example as shown in Figure 4 as item 401 and described on page 6, lines 22-24, a plurality of keys, for example, as shown in Figure 4 as item 402 and described on page 6, lines 22-24, and a layer including a switching function and a layered foil illumination structure for each of the plurality of keys, integrated together, for example, as shown in Figure 4 within item 403 and described on page 6, lines 28-34.

It is respectfully submitted that all of the claims, as presented, are clearly novel and patentable over the prior art of record. Accordingly, the Board of Appeals is respectfully requested to favorably consider the rejected claims and to reverse the final rejections, thereby enabling this application to issue as a U.S. Letters Patent.

The Commissioner is hereby authorized to charge payment for any additional fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,

  
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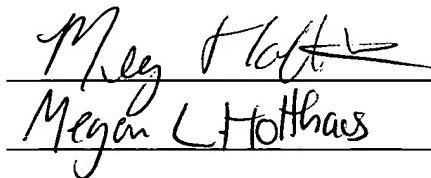
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